

ACCESS TO MATERNAL HEALTH SERVICES IN RURAL MANIPUR

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Abstract

Based on primary data, the present study examines the differentials of maternal health care use on the perspective of availability of health services within or nearby residences in rural settings. The study also examines the main hindrances faced by women from receiving maternity health care, especially from the public facilities. The result indicates that a significant difference has been observed between PHC villages and other villages in respect of maternal health coverage. Despite free provisions of maternal health care were being made by the government, rural women overall underutilized health services. Chi square test indicates that apart from women's literacy, household's economic conditions play a significant role for institutional delivery and delivery assisted by health professionals primarily in far-flung remote villages.

Key Words: Antenatal care, Place of delivery, Assistant during delivery, Residence.

Scarcity of medical facilities has a negative impact on seeking behavior of maternal health services, basically for women living in difficult terrains like in India's Northeast region. This article draws upon a comparative study of mothers access to maternity health services in three setting of the villages, i.e., PHC villages, SC villages and other villages (without any health facility) in Churachandpur district of Manipur, in order to demonstrate the traditional way of investigating on the perspectives of rural-urban differentials on health services use are inadequate but availability and accessibility of health services are more important that determines the uptake of health care in rural context of Manipur. The researcher argues that availability of health

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facility and transportation matters in realities of women's lives in seeking maternity care. The study reveals the importance of availability of health services in rural areas that determine the health seeking behaviors of mothers, and assesses utilization level, particularly on ante-natal care use plus its reasons that hinder women from receiving the same.

The researcher situates the examination here within the literature of health care access, particularly in rural context and within the area of reproductive health. The researcher then explores the relevance of this study of access to maternal health services by demonstrating that the availability of health services in remote corners of the state positively affects the likelihood of seeking maternal care, that encourages more considerably in the study area. This understanding would suggest a broader scope for interventions to improve health care use for a variety of marginalized populations.

Access is often known to be especially problematic in rural areas. Shortages of skilled workers and facilities, and unequal distribution of health resources, create barriers to care for large segments of the population. Access can be restricted by cultural, social, and economic factors that influence the perceived benefits of seeking care and the ability to obtain care. These include health-related knowledge and attitudes, women's autonomy within the household, and the economic status of households. In addition, accessibility is an important political benchmark of any health care system, often lauded as both a social goal and a human right (Gulliford, Figueroa-Munoz, & Morgan 2003).

A growing number of studies document perceptions of quality in health care that describe social barriers to health service utilization (Abouzahr, Vlassoff, & Kumar, 1996; Hicks, 1992; Humphreys, Mathews-Cowey, & Wienand, 1997; Morgan, 2003; Penchansky & Thomas, 1981; Rice, 1997; Roberts, Battaglia, & Smithpeter, 1999; Sutherns, McPhedran, & Haworth-Brockman, 2004). Other researchers explore that poor, ethnic minorities and women, are particularly at risk for poor access to care (Morton & Loos, 1995; Newbold, 1998; Vissandjee, Weinfeld, Dupere, & Abdool, 2001). A few studies go further to address the connections between various dimensions of social inequality, in most cases revealing cumulative disadvantage.

Poorer and less educated women and those living in rural areas are far less likely to give birth in the presence of a skilled health worker than better-educated women who live in wealthier households or urban areas. The reasons for this include physical inaccessibility and prohibitive costs, but may also be the result of inappropriate socio-cultural practices. It is not enough for services to be available; they must also be of high quality and should be provided in a way that is both culturally appropriate and responsive to women's needs (Naveneethan K. and Dharmalingam A.).

Young (1999) argues that social distance is as important as geographical distance. Health care utilization, like health itself, is shaped by a variety of social determinants. To put it simply, the nearest service is not necessarily the one that is used (Haynes, 2003). Andersen's model identifies what he calls "primary determinants of health behavior," which include people's predisposition to use a service, factors that impede or enable use, and the perceived or evaluated need for the service. He highlights among the enabling resources, not only the importance of the availability of personnel and services, but also the means and "know-how" to make use of those services. The findings presented here confirm the importance of enabling resources i.e., availability of health facility and transportation in rural areas triggered women to seek maternal health services in rural areas of Manipur where more than 90 percent of the total areas of the state are hills.

MATERIALS AND METHODS

The present study was carried out in Churachandpur district, Manipur which is one of the largest districts of the State and occupies the south-western part of the State (Figure 1). Churachandpur district has the highest literacy rate among the hill districts of the State, but has low utilization of maternal health services. The District has 5 sub-divisions, viz. Tipaimukh, Thanlon, Henglep, Churachandpur and Singngat. Out of the five Sub-divisions, two sub-divisions namely Churachandpur and Singngat were selected for the study. The study was conducted in 2 blocks, viz. Saikot Block from Churachandpur Sub-division and Singngat Block from Singngat Sub-division. Random sampling technique was used to draw district, blocks, villages and respondents. Within these two blocks, 2 PHC villages, 6 SC villages and 8 other villages (without any health facility) were selected for the study, with a sample size of 130 mothers each

were interviewed from the three villages setting. The field survey was undertaken from January-March 2014.

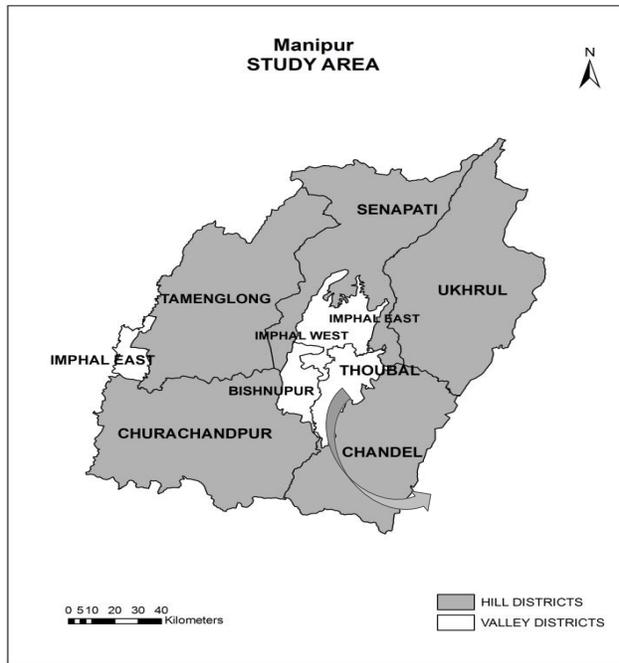


Fig. 1: Location of the Study Area

Participants were women with at least one child under 18 months old, who lived in the study villages regardless of where they actually gave birth. Their age ranged from 15-49 and they were largely tribal. Although the sample of mothers was diverse in terms of birth experiences, income, education levels, number of children, and age, it was strikingly homogeneous in terms of ethnicity (Kuki-Zomi). The study collected data on the access to maternal health care services during pregnancy and the birth of the reference child. They are:

Ante-natal check-ups: Information on ante-natal care during pregnancy with all children born during the study: whether ante-natal care was obtained, who provided the ante-natal care (For example: health professional or trained/traditional birth attendant), number of ante-natal check-ups, timing of first ante-natal check-up, medical tests conducted during pregnancy and reasons for not receiving ante-natal care.

Place of delivery: The place of delivery is an important determinant for reducing the risk of infant and maternal death. Women were asked whether their last baby was born at home or at any health institution (public hospitals or other health care institutions).

Assistance during delivery: Assistance during delivery is an important component in the reproductive health care services; it can reduce the risk of obstructed labour during delivery and is highly associated with place of delivery. Information was collected about who assisted during delivery: health personnel (doctor, Auxiliary Nurse Midwife (ANM), nurse or midwife, trained traditional birth attendant, friends or relatives).

FINDINGS

Maternal health refers to the health of women during pregnancy, childbirth and postpartum period (World Health Organization 2012). Pre-natal care ensures that the health of the expectant mother, more specifically her nutritional status, is periodically supervised, and avoidable complications of pregnancy are prevented or treated. Intra-natal services provide skilled care and attention by trained health personnel during child birth. Post-natal care includes checks on the mother's health after delivery that makes it possible for a gynecologist to diagnose and prevent some of the chronic and disabling conditions common in women (Shivakami 2008).

Ante-natal check-ups

Ante-natal care (ANC) or check-up is defined as pregnancy-related health care provided by a doctor or a health worker in a medical facility or at home. The safe motherhood initiative proclaims that all pregnant women must receive basic professional ante-natal care. In this context the mothers were asked whether they saw anyone for antenatal care for their most recent birth. Table 1 shows that 58.2 percent respondents had received any antenatal check-up while 69.2 percent from PHC villages received ante-natal check-up, 56.9 and 48.5 percent of respondent women from SC and Other villages received the same, respectively. While 58 percent pregnant women received any ANC, institutional delivery ended with only 43.2 percent. The question comes up who are the pregnant women and why they drop out from maternal health care services even after receiving ANC; why health providers are unable to keep ANC seekers into the whole spectrum of maternal health care services till the end, especially till the delivery. Out of 390

sample women only 44.6 percent of birth deliveries are carried out with the assistance of trained health professionals.

Table1.Distribution of women according to receiving ante-natal check-ups

Response	Overall	PHC villages	SC villages	Other villages	Chi square =11.7 significant at 1%
Yes	58.2 (227)	69.2 (90)	56.9 (74)	48.5 (63)	
No	41.8 (163)	30.8 (40)	43.1 (56)	51.5 (67)	
N	100.0 (390)	100.0 (130)	100.0 (130)	100.0 (130)	
Note: Parenthesis indicates absolute number.					
Source: Field Survey, 2014					

Place of ante-natal check-ups

Women respondents who received ante-natal care services during their last pregnancy were asked about the place where they have received ante-natal care. Table 2 and Figure 2 present that more mothers in PHC villages have received ante-natal check-up from primary health centres (42.2 percent), followed by private facilities (30 percent), government hospitals (18.9 percent), and others (8.8 percent). Similarly, in other villages, more mothers have received the same from primary health centres(41.3 percent), sub-centres (31.8 percent), government hospitals (14.3 percent), private facilities (6.3 percent) and others (6.3 percent). Also, the corresponding figures for the respondents from SC villages are:Primary health centre (35.7 percent), Sub-centres (21.8percent), government hospitals (21.6 percent) privates (18.2 percent) and others (2.7 percent) has gone to for antenatal check-up. Hence, mothers from PHC villages are more likely to receive qualitative ante-natal care compared to SC and Other villages since sub-centre is the lowest level of service provider unit. The chi square value is significant at 1 percent level in the study area.

Table 2. Place of ante-natal check-up by women					
Place	Overall	PHC villages	SC villages	Other villages	Chi square =37.4 significant at 1%
Sub-Centre	17.9(40)	0(0)	21.8 (16)	31.8(20)	
Primary Health Centre	39.8(90)	42.2(38)	35.7 (26)	41.3(26)	
Govt. hospital	18.3(42)	18.9(17)	21.6 (16)	14.3(9)	
Private ¹ facilities	18(41)	30.0(27)	18.2(14)	6.3(4)	
Others ²	6(14)	8.8(8)	2.7 (2)	6.3(4)	
N*	100.0 (227)	100.0 (90)	100.0 (74)	100.0 (63)	
*Indicates proportion of the respondents who have received ante-natal check-up during last birth.					
¹ Includes private hospital/clinic/medical shop.Note: Parenthesis indicates absolute number.					
² Includes non-governmental hospital/trust hospital or clinic.					
Source: Filed Survey, 2014					

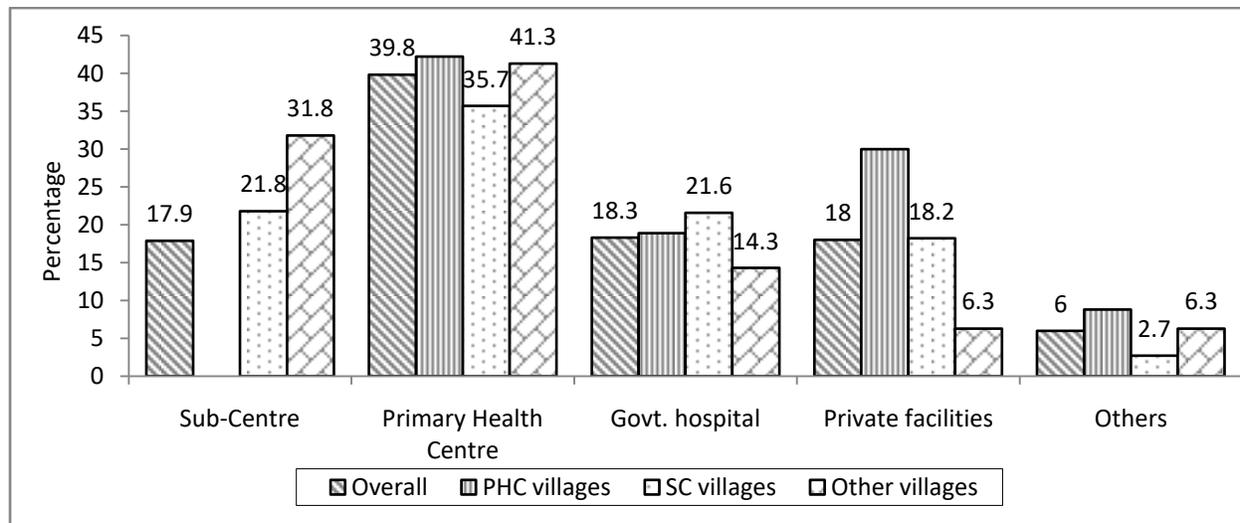


Fig. 2: Place of ante-natal check-up in rural Manipur (in %)

Number of ante-natal care visits

The number and timing of the first ante-natal visit are important for the health of the mother and the outcome of the pregnancy. The World Health Organization (WHO) recommends that all pregnant women should have at least four ante-natal care (ANC) assessments by or under the supervision of a skilled attendant. These assessments should be spaced at regular intervals throughout pregnancy, commencing as early as possible in the first trimester (NFHS-III, 2005-06). As such, women respondents who received ante-natal care during their last pregnancy were asked about the total number of ante-natal care visits they had. It is found from Table 3 that ante-natal care received by mothers in sample villages varied significantly with regard to the number of times such as care was received. Generally, less than four times ante-natal care during pregnancy is more common in other villages compared to PHC and SC villages. Further it is evident that majority of women received more than four ante-natal cares in their last pregnancy across the sample PHC villages. Mothers who received four or more ante-natal cares during pregnancy in the sample villages is encouraging, especially in PHC 57.8 percent. On the contrary, four or more ante-natal care in the sample villages are comparatively less as about 39.2 percent and 31.7 percent women received four or more ante-natal care, respectively in SC and Other villages. This presents that number of ante-natal care visits is more among the PHC villages' women, followed by SC villages' women and less among Other villages' women. The shorter distance to place of ante-natal care services and the lesser cost of travel in PHC and SC villages, as well as the higher educational attainment of mothers in PHC or SC villages could be the factors in explaining the higher number of ante-natal care visits in PHC and SC villages. The chi square value is significant at 1 percent in the study area.

No. of time received ANC	Overall	PHC villages	SC villages	Other villages	Chi square =23.2 significant at 1%
< 4	55.5 (126)	42.2 (38)	60.8 (45)	68.3 (43)	
≥ 4	44.5 (101)	57.8 (52)	39.2 (29)	31.7 (20)	
N	100.0 (227)	100.0 (90)	100.0 (74)	100.0 (63)	
Note: Figures in brackets denote absolute number.					
Source: Field Survey, 2014					

Timing of first ante-natal check-ups

The first ante-natal check-up should take place at the latest during the second trimester of pregnancy (NFHS- III, 2005-06). In this context, women respondents who received ante-natal care for their last pregnancy were asked about the month in which they had their first ANC visit. Table 4 shows that there is a slight variation between the three villages groups. Accordingly, around 44.1 percent of the mothers out of 227 in the study area reported that their first visit for ante-natal check-up occurred within three weeks of pregnancy period. It is interesting that in all the three villages groups, majority of the mothers received ante-natal care before 6 months, and the proportion is 88.9 percent in PHC villages, 86.5 percent in SC villages and 84.1 percent in Other villages. A little over 15 percent from Other villages received antenatal care for the first time as late as 6 months into their pregnancy while only 11.1 percent and 13.5 percent of SC and PHC villages mothers performed the same, respectively. It suggests that mothers from Other villages are more likely to receive their first ante-natal check-up at a late stage compared to the mothers from PHC villages and SC villages where the proportion are only 11.1 percent and 13.5 percent, respectively.

Table 4. Percentage of the ante-natal mothers according to timing of pregnancy who received antenatal check-ups

Month	Overall	PHC villages	SC villages	Other villages	
Up to 3	44.1 (100)	50.0 (45)	44.6 (33)	34.9 (22)	Chi square =4.6
4 to 6	42.7 (97)	38.9 (35)	41.9 (31)	49.2 (31)	
7 to 9	13.2 (30)	11.1 (10)	13.5 (10)	15.9 (10)	
N*	100.0 (227)	100.0 (90)	100.0 (74)	100.0 (63)	
*Indicates proportion of the respondents who have received ante-natal check-up during last birth.					
Note: Figures in brackets denote absolute number.					
Source: Filed Survey, 2014					

Test Performed

The effectiveness of ante-natal care in ensuring safe motherhood depends on the test and measurement done and the advice given as part of ante-natal package. The women who received ante-natal care services were asked whether they got tests like weight/blood pressure/blood test/urine test/height measurement during their last pregnancy. The results of the ante-natal components during last pregnancy are presented in Table 5. The figures shown in the table is somehow encouraging with the respondents who reported that they had their weight measured. However, other tests received by the respondents are discouraging and unsatisfactory. On average, just over one-third (37.8 percent) of the respondents (who received ante natal check-ups) reported that they had their blood tested during ante-natal check-ups. It is learned that there is lack of physical and laboratory facilities and qualified medico personnel at local level of sub-centres and primary health centres. Moreover, the proportions of the respondents who had blood pressure checked (45.8 percent), urine tested (46.8 percent) and height measured (6.3 percent) are low. Height measured is quite distressing since only 6.3 percent pregnant women have got their height measured. This might be due to lack of instrument for measuring height or negligence of the health providers as rural women are generally short stature.

It is also observed that there is a difference among the villages groups. Most of these tests and measurement were performed 14.4 times more often during ante-natal check-ups by the respondents from PHC villages than by the respondents from other villages. Similarly, 9.5 times more for the same from PHC villages than by the respondents from SC villages. The difference among the respondents of PHC, SC and other villages for getting blood tested is higher. In PHC villages, the proportion of the respondents who had their blood tested is 51.5 percent, followed by 33 percent and 28.7 percent in SC and other villages, respectively. The chi-square value is significant at 5 percent level in the study area.

Response	Overall	PHC villages	SC villages	Other villages	
Weight measured	56.3	61.4	56.0	51.3	

Height measured	6.3	5.9	8.4	4.6	Chi square =2.12 significant at 5%
B.P. Checked	45.8	58.9	39.2	34.9	
Blood tested	37.8	51.5	33.0	28.7	
Urine tested	46.8	53.8	47.0	39.6	
Source: Field Survey, 2014					

Reasons for not receiving ante-natal check-ups

Table 6 presents percentage distribution of women those who did not seek ante-natal check-up by various reasons. Of the total respondents in the study area, 40 women in PHC villages, 56 women in SC villages and 67 women in other villages did not receive ante-natal care. In PHC villages, 25 percent pregnant women who did not receive any ante-natal check-ups thought 'not necessary to check-up' with other reasons mentioned being 'long queue (22.5 percent)', 'economic constraints (20 percent)', 'required for household work (15 percent)' and 'lack of knowledge (10 percent)'. In SC villages, 25 percent women stated that they were 'not necessary to check-up' with other reasons being 'economic constraints (20.9 percent)', 'transportation problem (17.9 percent)', 'required household work (14.9 percent)', 'lack of knowledge (14.3 percent)' and 'long queue (7.1 percent)'. Similarly, in other villages, 24.4 percent women felt that it is 'not necessary to check-up', 22.4 percent reasoned to 'economic constraints', 21.9 percent thought 'transport problem' as a burden for not seeking ANC, 20.3 percent reasoned to 'lack of knowledge', 9.4 percent felt of 'required for household work', and only 1.6 percent thought of 'long queue'. This shows that ante natal care services are not taken seriously by women during their pregnancy due to negligence, poverty and lack of awareness in the rural areas of Manipur. Thus there is a need to educate mothers and families about the availability and benefits of ante-natal check-ups to help to overcome traditional attitudes and other hurdles that prevent mothers from seeking ante-natal care. The chi-square value is significant at 1 percent level in the study area.

Reasons	Overall	PHC villages	SC villages	Other villages	Chi square =13.2 significant at 1%
Economic constraints	21.6	20.0	20.9	22.4	
Inconvenient*	15.6	10.0	14.3	20.3	
Transport problem	16.9	7.5	17.9	21.9	
Long queue	8.8	22.5	7.1	1.6	
Not necessary to check-up	25.4	25.0	25.0	24.4	
Required for household work	11.8	15.0	14.9	9.4	

Source: Field Survey, 2014.

* includes timing and not permitted.

Reasons for not going to the PHC/SC for ante-natal check-ups

As mentioned above, 23 mothers, out of 102 from PHC villages, 32 mothers, out of 95 from SC villages and 21 mothers, out of 87 from other villages reported that they did not go to neither Sub-Centre nor Primary Health Centres, but opted for private health institution for antenatal check-ups. So they were questioned about the reasons behind for not receiving ANC at PHC/SC or public health centres. Based on the report provided by the respondents the two main reasons for not going to public health centres (mainly Sub-Centre and Primary Health Centre) for ante-natal check-up are 'Negligence of Staff' and 'lack of facilities'. 37.5 percent women from PHC villages, 33.5 percent from SC villages and 34.2 percent from Other villages have expressed 'Negligence of staff' at Primary Health Centre and Sub-Centre as the main reason for not going to these centres, followed by 27.1 percent and 25.9 percent women from other villages and SC villages, respectively expressed due to 'transport problem'. However, in case of mothers from PHC villages, 25 percent of the respondents expressed 'Lack of facilities' is the main reason for preferring private facilities over the public health facilities (Table 7).

Although ‘Negligence of staff’ is the main reason expressed by larger respondents for not attending at Public health centres or Sub-centres, yet the proportion of the mothers to this issue is highest in PHC villages than other villages by small margin. However, the next important reason claimed by the respondents is ‘transport problem’. In this case, although it is not the second important reason for PHC villages mothers, the proportion is larger for other villages than SC villages and this may be due to absence of any public health facility coupled with absence of private health centre. Another notable reason for not visiting the Sub-centre or Primary health centre in all the village groups is ‘Waiting time too long’ that compels the respondents to go to private health institution to meet essential medical facilities and more qualified medical staffs. As such the main reason stated in the study areas is negligence of staff for not going to the Sub-centre and Primary health centre for ante natal check-up as on average larger percent (35.1percent) out of 106 respondents have expressed this reason, followed by long distance (20.8 percent), lack of facilities (21.5 percent), waiting too long (15.4 percent) and complication (7.2 percent).

Table7. Reasons for not going to Primary Health Centres/Sub-Centres for ANC by women				
Response	PHC villages	SC villages	Other villages	All
Lack of facilities ¹	25.0	18.6	20.8	21.5
Transport problem	9.4	25.9	27.1	20.8
Negligence of staff ²	37.5	33.5	34.2	35.1
Complication	6.3	7.8	7.7	7.2
Waiting too long	21.9	14.2	10.2	15.4
Note: The percent is calculated on the basis of multiple responses of the respondents who did not go to the primary health centre for ante-natal check-up.				
¹ Includes lack of qualified paramedical staffs, medicine, and facility of laboratory test.				
² Includes rudeness of staff and absenteeism.				
Source: Field Survey, 2014				

Person who assisted delivery

Obstetric care from a trained provider during delivery is recognized as central for the reduction of maternal and neonatal mortality. Births delivered at home without the assistance of trained health professionals are more risky than those carried out with the assistance of trained health professionals. Table 8 gives the results about the person who assisted the delivery. About 5.8 percent women in the study area reported that their last delivery was assisted by health personnel, 38.8 percent women mentioned traditional birth attendant (TBA) and 55.4 percent got assistance of relatives/friends. The proportion of women whose last delivery or birth was assisted by health personnel constitutes 15.7 percent in PHC villages, 2.3 percent in SC villages and there is none in other villages. The percentage of women who got assistance from TBA is 31.4, 25.4 and 43.7 percent in PHC villages, SC villages and other villages, respectively. The proportion of women whose deliveries/births were assisted by friends/relatives is 52.9, 36.2 and 56.3 percent in PHC villages, SC villages and other villages, respectively. Thus, getting delivery/birth assistance from health personnel is highest in PHC villages, followed by SC villages and other villages in the study area.

Table 8. Percentage of women according to assistance at home delivery				
Type of village	Health personnel*	Dai (TBA)	Friends/relatives	Chi square =19.15 significant at 1%
PHC villages	15.7 (11)	31.4 (22)	52.9 (37)	
SC villages	2.3 (3)	25.4 (33)	36.2 (47)	
Other villages	0.0	43.7 (38)	56.3 (49)	
N	5.8 (14)	38.8 (93)	55.4 (133)	
*Includes assistance ANM/nurse/midwife/LHV etc.				
TBA=Traditional birth attendant. Note: Figures in brackets denote absolute number.				
Source: Field Survey, 2014				

Place of delivery

Another important thrust of the Reproductive and Child Health Programme is to encourage deliveries in proper hygienic conditions under the supervision of trained health professionals. For this purpose, women respondents were asked about the place of delivery during their last pregnancy. Table 9 and Figure 3 show that institutional delivery was very low. Of all the survey

participants, only 43.2 percent gave birth at a health facility, 20.7 percent of them at government hospital, 12.6 percent at primary health centre and 12.4 percent at a private hospital/clinic. The table also shows that the highest proportion of birth took place at home (56.9 percent). There are variations in utilization of health services with regard to delivery at type of village levels. In PHC villages, the higher proportion of birth took place at health institution (53.8 percent), followed by government hospital (23.5 percent), PHC (14.6 percent) and private sectors (15.7 percent). However in other villages the proportion of birth that took place at home is higher (61.5 percent) and the proportion of births that took place in government hospital, primary health centre and private sectors is lower when compared to PHC villages. The same pattern occurs in SC villages where 55.4 percent of women gave birth at home and less than half was delivered in health institutions. Thus, institutional deliveries, particularly from the government (government hospitals) are the common place for delivery for those who had institutional delivery. One factor contributing to these patterns may be due to economic constraints that people approached government facilities over private facilities where they charge high cost during both pregnancy and delivery.

Table 9. Place of delivery during last pregnancy						
Type of Village	Institutional Delivery	Delivery at Home	Percentage of Institutional Delivery			Chi square =20.9 significant at 1%
			PHC	Govt. hospital	Private	
PHC villages	53.8 (70)	46.2 (60)	14.6	23.5	15.7	
SC villages	44.6 (58)	55.4 (72)	12.3	19.4	12.9	
Other villages	38.5(50)	61.5 (80)	10.8	19.2	8.5	
N	43.2 (168)	56.9 (222)	12.6	20.7	12.4	
Note: The figures in brackets indicate the absolute number.						
Source: Field Survey, 2014						

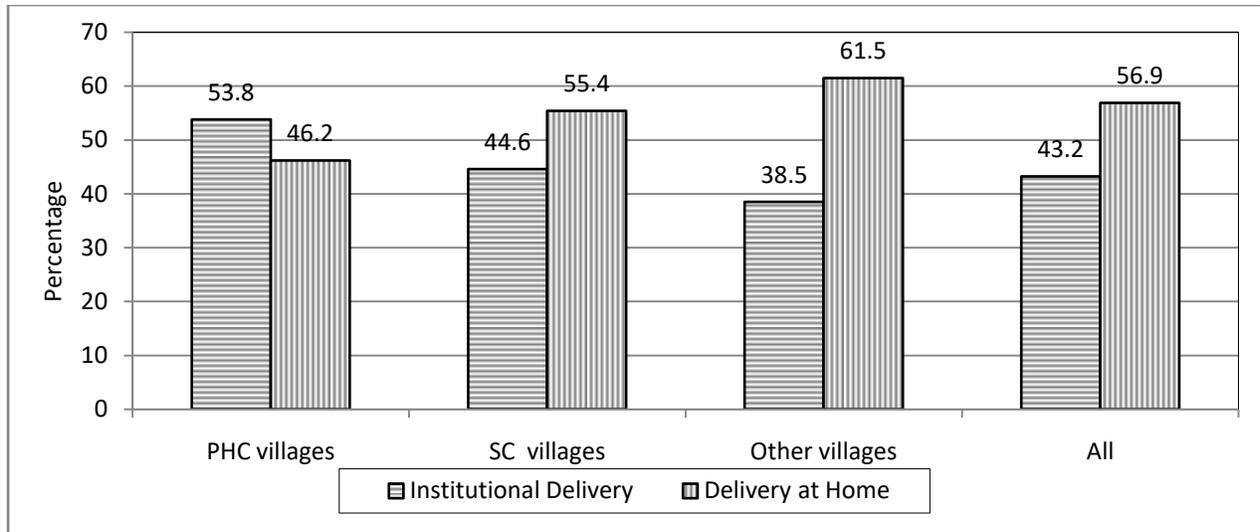


Fig. 3: Place of delivery in rural Manipur

Reasons for non-Institutional delivery

Respondents who did not utilize health facilities for delivery were asked about the reason for not doing so. The main reasons for non-institutional delivery, reported by the mothers in the study area have been given in Table 10. Proportion of women (26.2 percent from PHC villages, 25.2 percent from SC villages, 26.6 percent from other villages) who have reported that it was ‘easy birth’ that health facilities was not utilized for delivery care. The second most frequently mentioned reason was ‘high cost’ (23.2 percent from PHC, 22.6 percent from SC and 24.3 percent from other villages). The third main reason expressed by the women was ‘too far/no transport’ (9.6 percent from PHC villages, 27.1 percent from SC villages and 30 percent from other villages). Other factors contributing for not visiting a health institution for delivery were ‘sudden onset of labor’ (20.2 percent from PHC villages, 14.5 percent from SC villages, 7.0 percent from other villages), ‘not aware of service’ (4.5 percent from PHC villages, 8.5 percent from SC villages, 11.1 percent from other villages) and ‘poor quality of service’ (16.3 percent from PHC, 2.1 percent SC villages, 1.0 percent from other villages). The pattern was almost similar in all the villages groups.

Table 10. Percentage of women according to reasons for non-institutional delivery					
Reason	Overall	PHC villages	SC villages	Other villages	Chi square =22.8 significant at 5%
Cost too much	23.4	23.2	22.6	24.3	
Sudden onset of labor	13.9	20.2	14.5	7.0	
Too far/no transport	22.3	9.6	27.1	30.0	
Not aware of service	8.0	4.5	8.5	11.1	
Poor quality service	6.5	16.3	2.1	1.0	
Easy birth	26.0	26.2	25.2	26.6	
Source: Field Survey, 2014					

Reasons for not going to Primary Health Centre for delivery

The highest proportion of the respondent from PHC villages (43.8 percent) have expressed ‘absence of doctor/staff’ as the main reason while ‘poor quality of services’ is the main reason for not utilizing primary health centre by SC (30.8 percent) and other villages (36.3 percent) women. Another main reason for non-utilization of primary health centre is ‘poor quality of services’ revealed by PHC villages’ mothers whereas ‘absence of doctor/staff’ is the other reason expressed by SC and other villages’ mothers.

On average, the proportion of the respondents who expressed ‘poor quality of services’ is 25.1 percent in PHC villages and the proportion of the respondents who expressed ‘absence of doctor/staff’ is 23.1 percent and 19.2 percent from SC and other villages, respectively. Further, while PHC villages’ mothers expressed ‘complication’ as the third main reason for not utilizing primary health centre for delivery, both SC and other villages’ mothers revealed ‘inconvenient’ as the reason for the same. The proportion of the respondents who expressed ‘complication’ as a reason of not going to primary health centre for delivery of birth is 12.5 percent in PHC villages and who expressed ‘inconvenient’ is 15.4 percent and 14.1 percent, respectively from SC and other villages (Table 11).

Table 11. Percentage of women according to reasons for not going to PHC for delivery					
Reason	Overall	PHC villages	SC villages	Other villages	Chi square =10.7
Lack of facilities	10.3	6.2	15.4	9.1	
Rudeness of staff	7.7	6.2	7.6	9.1	
Absence of doctors/staff	29.4	43.8	23.1	19.2	
Poor quality service	30.8	25.1	30.8	36.3	
Inconvenient	11.9	6.2	15.4	14.1	
Complication	10.8	12.5	7.7	12.2	
Source: Field Survey, 2014					

SUMMARY AND CONCLUSIONS

In this paper an attempt is made to establish the importance of availability and accessibility of maternal care in order to increase the utilization level within the rural context of Manipur. Lack of health facilities and unavailability of proper transportation has been observed significant deterrents in maternal health service use in the study area since more than ninety percent of the state are covered by hills. Huge difference has been observed between women living in PHC villages and other villages in coverage of maternal health services. This may most likely be due to socio-economic factors in addition to accessibility of health services since many mothers reported that 'too far or long distance' as one the important reason that made them to avoid access to maternity health services. The reasons that influence women's seeking behavior of maternal health services differ especially between women in PHC villages and other villages. It is found that while women from other villages report that 'too far/no transportation' was the main reason for non-utilization of maternal health care, majority of the women in PHC villages stated that 'easy birth' was the main reason for the same with respect to institutional delivery. However, women in PHC/SC were more concern on the quality of health services provided by the public health facilities (Table 11). It is due to non-availability of drugs and staff at primary health centres and sub-centres that many women could not receive complete course of maternal health services (table not shown). Many mothers were compelled to approach private health facilities on account of negligence and absence of doctors and staff in Sub-centres and Primary health

centres. Haynes (2003) also argued that the nearest service is not necessarily the one that is used. Considering institutional delivery, there is large difference between PHC villages and other villages, while 53.8 percent have delivered in health institutions in PHC villages, only 38.5 percent of mothers have given birth at health facilities.

In addition, the study found that women's literacy is an important predictor for the use of maternal health care services in the study areas since illiterate women are less likely to use maternal health care services for delivery assistance and place of delivery compared to literate women. Literature provides many reasons for higher utilization of maternal health care services by educated mothers than uneducated mothers. Educated women may have a greater decision making power on health related matters and also attach a higher value to the welfare and their health. Further, educated mothers will have more confidence in handling the officials and have the ability and willingness to travel alone outside the home to seek health services.

The study concludes that use of maternity health services is not same across rural areas. In order to increase the level of maternity health services use in rural Manipur, there is need to increase availability and accessibility of maternal health care. Although illiterate women are less likely to use maternal health care services, there was no difference among the educated. Also, the health workers including aganwadi and ASHA workers in the rural areas are playing a pivotal role in providing ante-natal care in rural areas. Hence the urgent need is to develop innovative strategies that will help upscale intervention especially for improvement in the use of these services by rural women. In this direction it is recommended that special attention be given to pre-natal care and place of delivery where rates of utilization are reasonably low.

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